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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,594	05/23/2001	Jorg Rheims	VOI0189.US	9308

7590 10/01/2002  
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EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

DATE MAILED: 10/01/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/863,594

Applicant(s)

RHEIMS ET AL.

Examiner

Steve Alvo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) 20-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Claims 20-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6. The requirement is repeated and made Final.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over KLUNGNESS et al in view of CARLSMITH et al and GREEN et al.

KLUNGNESS et al teaches fluffing calcium oxide or hydroxide is added in a reactor/fluffer to form calcium carbonate. The pulp of KLUNGNESS et al is fluffed in a pressurized refiner or any suitable high shear device (column 7, lines 6-19). CARLSMITH et al teaches that refiners fluff the pulp and make the pulp more porous. It would have been obvious that the refiner makes the pulp more porous, e.g. increases the specific surface, as taught by CARLSMITH et al. IT would have been further obvious that the refiner of KLUNGNESS et al fluffs the pulp as such is taught by CARLSMITH et al. Or it would have been obvious to substitute the high shear refiner/fluffer of CARLSMITH et al for the high shear refiner of KLUNGNESS et al as KLUNGNESS teaches that any high shear mixing device could be used to agitate the pulp. The claimed conditions of the dependent claims do not appear to differ from the conditions used by KLUNGNESS. Green et al teaches adding calcium carbonate directly into the pulp during agitation rather than precipitating calcium carbonate onto the pulp. It would

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have been obvious to the artisan that the calcium carbonate of KLUNGNESS could have been added directly into the fluffer (refiner) of KLUNGNESS rather than precipitated by the *in situ* reaction of calcium oxide or hydroxide and carbon dioxide.

Claims 1-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over DOELLE in view of GREEN et al.

DOELLE teaches fluffing calcium oxide or hydroxide is added in a reactor/fluffer to form calcium carbonate. The pulp of DOELLE is fluffed in fluffer (18) with the added calcium hydroxide or oxide and the precipitated calcium carbonate that is formed is fluffed in fluffer (20). The fluffers of DOELLE would open up the fibers by increasing the specific surface of the fibers. The claimed conditions of the dependent claims do not appear to differ from the conditions used by DOELLE. Green et al teaches adding calcium carbonate directly into the pulp during agitation rather than precipitating calcium carbonate onto the pulp. It would have been obvious to the artisan that the calcium carbonate of DOELLE could have been added directly into the fluffer of DOELLE rather than precipitated by the *in situ* reaction of calcium oxide or hydroxide and carbon dioxide.

The argument that KLUNGNESS teaches using dry pulp rather than a stock suspension is not convincing as the instant process teaches using the same "Fiber Loading<sup>TM</sup>" process used by KLUNGNESS et al. See the instant specification, page 2, lines 5-6 and page 1, lines 10-23. Besides it would have been obvious to add the calcium carbonate in a dry stage or in re-slurried form as such is taught by GREEN et al, page 3, lines 65-69.

The argument DOELLE et al and KLUNGNESS et al do not add particles of calcium carbonate is not convincing as the direct addition of calcium carbonate is taught by GREEN et al,

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see GREEN et al column 4, lines 59-61. Green et al teaches adding calcium carbonate directly into the pulp during agitation rather than precipitating calcium carbonate onto the pulp. It would have been obvious to the artisan that the calcium carbonate of DOELLE or KLUNGNESS et al could have been added directly into the fluffer of DOELLE or KLUNGNESS et al rather than precipitated by the *in situ* reaction of calcium oxide or hydroxide and carbon dioxide, as such is taught by GREEN et al.

Applicant's amendment, adding "at least one additive being  $\text{CaCO}_3$ ", necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

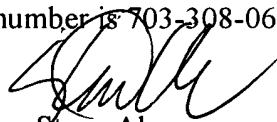
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 703-308-2048. The examiner can normally be reached on 6:00 AM to 2:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Steve Alvo  
Primary Examiner  
Art Unit 1731

msa  
September 28, 2002